which is acid and a thing which moves. In relation to this M. Virey says that he knows no blue (alkaline) flowers in which there is any movement. We will name to him a blue flower, Goldfussia anisophylla, in which the style is one of the most mobile*. On the subject of these excitable plants, M. Virey has quoted our observations on Stylidium graminifolium $\dagger$, but he makes us say things quite contrary to what we have written. Thus, we have nowhere said that the gynandric column of the Stylidieæ was articulated at its base by two opposite or antagonist fibres or muscles. Never should we have allowed ourselves to look upon vegetable fibres as muscles; we said (at pp. 15, 16, 17, and 18 of the memoir quoted) that these fibres exist all along the column, right and left. We never said that the column was irritable at its base, for it is not so ; it is irritable at its elbow, and we have figured it five times : never did we say that we had found fecule in these muscles, as M. Virey asserts; quite otherwise; we wrote (p.18) that the fibres had no influence on the movement, since when they were cut, the movement still took place. What is in our memoir is this : our idea is very clear; it is the feculiferous portion of the column which moves, and the same thing takes place in all the species of the genus Stylidium. This is an irrefragable fact ; whether it agree or not with received theories, signifies little; in the natural sciences facts go before all things, and it is by them alone that we can attain to truth.

## XLVIII.-An attempt to ascertain the Fauna of Shropshire and North Wales. By T. C. Eyton, Esq., F.L.S.

[Continued from vol.iii. p. 29.]

> Additions to Vertebrata.

Vespertilio Nattereri, Kahl. (Reddish Grey Bat.) One specimen is in my possession, taken at Eyton.

Sorex araneus, Linn. Since the publication of the former portion of this series of papers, the discovery of the Rev. L. Jenyns, that this

[^0]which is acid and a thing which moves. In relation to this M. Virey says that he knows no blue (alkaline) flowers in which there is any movement. We will name to him a blue flower, Goldfussia anisophylla, in which the style is one of the most mobile*. On the subject of these excitable plants, M. Virey has quoted our observations on Stylidium graminifolium $\dagger$, but he makes us say things quite contrary to what we have written. Thus, we have nowhere said that the gynandric column of the Stylidieæ was articulated at its base by two opposite or antagonist fibres or muscles. Never should we have allowed ourselves to look upon vegetable fibres as muscles; we said (at pp. 15, 16, 17, and 18 of the memoir quoted) that these fibres exist all along the column, right and left. We never said that the column was irritable at its base, for it is not so ; it is irritable at its elbow, and we have figured it five times : never did we say that we had found fecule in these muscles, as M. Virey asserts; quite otherwise; we wrote (p.18) that the fibres had no influence on the movement, since when they were cut, the movement still took place. What is in our memoir is this : our idea is very clear; it is the feculiferous portion of the column which moves, and the same thing takes place in all the species of the genus Stylidium. This is an irrefragable fact ; whether it agree or not with received theories, signifies little; in the natural sciences facts go before all things, and it is by them alone that we can attain to truth.

## XLVIII.-An attempt to ascertain the Fauna of Shropshire and North Wales. By T. C. Eyton, Esq., F.L.S.

[Continued from vol.iii. p. 29.]

> Additions to Vertebrata.

Vespertilio Nattereri, Kahl. (Reddish Grey Bat.) One specimen is in my possession, taken at Eyton.

Sorex araneus, Linn. Since the publication of the former portion of this series of papers, the discovery of the Rev. L. Jenyns, that this

[^1]which is acid and a thing which moves. In relation to this M. Virey says that he knows no blue (alkaline) flowers in which there is any movement. We will name to him a blue flower, Goldfussia anisophylla, in which the style is one of the most mobile*. On the subject of these excitable plants, M. Virey has quoted our observations on Stylidium graminifolium $\dagger$, but he makes us say things quite contrary to what we have written. Thus, we have nowhere said that the gynandric column of the Stylidieæ was articulated at its base by two opposite or antagonist fibres or muscles. Never should we have allowed ourselves to look upon vegetable fibres as muscles; we said (at pp. 15, 16, 17, and 18 of the memoir quoted) that these fibres exist all along the column, right and left. We never said that the column was irritable at its base, for it is not so ; it is irritable at its elbow, and we have figured it five times : never did we say that we had found fecule in these muscles, as M. Virey asserts; quite otherwise; we wrote (p.18) that the fibres had no influence on the movement, since when they were cut, the movement still took place. What is in our memoir is this : our idea is very clear; it is the feculiferous portion of the column which moves, and the same thing takes place in all the species of the genus Stylidium. This is an irrefragable fact ; whether it agree or not with received theories, signifies little; in the natural sciences facts go before all things, and it is by them alone that we can attain to truth.

## XLVIII.-An attempt to ascertain the Fauna of Shropshire and North Wales. By T. C. Eyton, Esq., F.L.S.

[Continued from vol.iii. p. 29.]

> Additions to Vertebrata.

Vespertilio Nattereri, Kahl. (Reddish Grey Bat.) One specimen is in my possession, taken at Eyton.

Sorex araneus, Linn. Since the publication of the former portion of this series of papers, the discovery of the Rev. L. Jenyns, that this

[^2]species does not coincide with that so called on the continent, has been made known to the world; the name therefore which has been applied to it must be here adopted in the place of that before given; viz. for S. araneus read S. rusticus, Jen.

Sorex tetragonurus, Durer., Jen. (Square-tailed Shrew.) I have lately captured one specimen of this shrew in the marshy meadows bordering the river Tearne between Longdon and Allscot; its length from the tip of the snout to the root of the tail is 3 inches.

Arvicola pratensis, Bail. (Bank Vole.) Several times taken near Eyton.

Sula Bassana, Linn. (Gannet.) A specimen has lately been brought to me alive, caught during a high wind quite exhausted: it became so tame after a few days that it would take fish from the hand.

## Invertebrata.

## Land and Freshwater Mollusca.

Arion ater, Fer. Common.
Limax cinereus, Linn. Common.
Limax agrestis, Linn. Common under stones and logs of wood in autumn.

Vitrina pellucida, Mull. Common.
Succinea, Drap. Succinea amphibia, Turton, Manual, and S. amphibia, Drap., are two distinct shells; but S. oblonga, Turt., is S. amphibia, Drap. Helix peregra, Mont., is not either of these, but appears to be a true Succinea, although quoted by Turton as a synonym to Limneus pereger, but is the shell figured by Pennant under the name of Helix putris. With S. amphibia, Turt., I am unacquainted. The synonyms of the British species of the genus which I have had an opportunity of examining will therefore stand thus :-

Succinea amphibia, Drap. S. oblonga, Turt. Helix putris, Mont. Not uncommon about Eyton.

Succinea peregra. Helix peregra, Mont. Helix putris, Penn. Common; adhering to water plants.

Helix arbustorum, Linn. Common.
Helix aspersa, Gmel. Common in many localities, particularly on the walls of Beaumaris Castle, also near Rhoscolyn on Holyhead Island.

Helix nemoralis, Linn. Innumerable varieties of this common shell occur.

Helix hortensis, Linn. Occasionally occurs at Eyton.
Helix rufescens, Mont. Found on most sand hills near the sea.
species does not coincide with that so called on the continent, has been made known to the world; the name therefore which has been applied to it must be here adopted in the place of that before given; viz. for S. araneus read S. rusticus, Jen.

Sorex tetragonurus, Durer., Jen. (Square-tailed Shrew.) I have lately captured one specimen of this shrew in the marshy meadows bordering the river Tearne between Longdon and Allscot; its length from the tip of the snout to the root of the tail is 3 inches.

Arvicola pratensis, Bail. (Bank Vole.) Several times taken near Eyton.

Sula Bassana, Linn. (Gannet.) A specimen has lately been brought to me alive, caught during a high wind quite exhausted: it became so tame after a few days that it would take fish from the hand.

## Invertebrata.

## Land and Freshwater Mollusca.

Arion ater, Fer. Common.
Limax cinereus, Linn. Common.
Limax agrestis, Linn. Common under stones and logs of wood in autumn.

Vitrina pellucida, Mull. Common.
Succinea, Drap. Succinea amphibia, Turton, Manual, and S. amphibia, Drap., are two distinct shells; but S. oblonga, Turt., is S. amphibia, Drap. Helix peregra, Mont., is not either of these, but appears to be a true Succinea, although quoted by Turton as a synonym to Limneus pereger, but is the shell figured by Pennant under the name of Helix putris. With S. amphibia, Turt., I am unacquainted. The synonyms of the British species of the genus which I have had an opportunity of examining will therefore stand thus :-

Succinea amphibia, Drap. S. oblonga, Turt. Helix putris, Mont. Not uncommon about Eyton.

Succinea peregra. Helix peregra, Mont. Helix putris, Penn. Common; adhering to water plants.

Helix arbustorum, Linn. Common.
Helix aspersa, Gmel. Common in many localities, particularly on the walls of Beaumaris Castle, also near Rhoscolyn on Holyhead Island.

Helix nemoralis, Linn. Innumerable varieties of this common shell occur.

Helix hortensis, Linn. Occasionally occurs at Eyton.
Helix rufescens, Mont. Found on most sand hills near the sea.
species does not coincide with that so called on the continent, has been made known to the world; the name therefore which has been applied to it must be here adopted in the place of that before given; viz. for S. araneus read S. rusticus, Jen.

Sorex tetragonurus, Durer., Jen. (Square-tailed Shrew.) I have lately captured one specimen of this shrew in the marshy meadows bordering the river Tearne between Longdon and Allscot; its length from the tip of the snout to the root of the tail is 3 inches.

Arvicola pratensis, Bail. (Bank Vole.) Several times taken near Eyton.

Sula Bassana, Linn. (Gannet.) A specimen has lately been brought to me alive, caught during a high wind quite exhausted: it became so tame after a few days that it would take fish from the hand.

## Invertebrata.

## Land and Freshwater Mollusca.

Arion ater, Fer. Common.
Limax cinereus, Linn. Common.
Limax agrestis, Linn. Common under stones and logs of wood in autumn.

Vitrina pellucida, Mull. Common.
Succinea, Drap. Succinea amphibia, Turton, Manual, and S. amphibia, Drap., are two distinct shells; but S. oblonga, Turt., is S. amphibia, Drap. Helix peregra, Mont., is not either of these, but appears to be a true Succinea, although quoted by Turton as a synonym to Limneus pereger, but is the shell figured by Pennant under the name of Helix putris. With S. amphibia, Turt., I am unacquainted. The synonyms of the British species of the genus which I have had an opportunity of examining will therefore stand thus :-

Succinea amphibia, Drap. S. oblonga, Turt. Helix putris, Mont. Not uncommon about Eyton.

Succinea peregra. Helix peregra, Mont. Helix putris, Penn. Common; adhering to water plants.

Helix arbustorum, Linn. Common.
Helix aspersa, Gmel. Common in many localities, particularly on the walls of Beaumaris Castle, also near Rhoscolyn on Holyhead Island.

Helix nemoralis, Linn. Innumerable varieties of this common shell occur.

Helix hortensis, Linn. Occasionally occurs at Eyton.
Helix rufescens, Mont. Found on most sand hills near the sea.

Helix hispida, Mont. H. sericea, Drap. Common.
Helix lucida, Drap. Common.
Helix radiata, Mont. H. rotundata, Mull., Drap. Common.
Helix ericetorum, Linn. At Rhoscolyn and Towyn Merioneth : common on stones and walls on the sea shore.

Bulimus fasciatus, Mont. B. acutus, Mull. Common on most sandy shores above high water mark, and where there is some slight vegetation.

Pupu Secale, Drap. Very common at Eyton in the autumn, adhering to the under side of logs of wood and stones.

Cyclostoma obtusum, Drap. Common on the Weald moors, adhering to water plants.

Planorbis carinatus, Drap. Common in ditches on the Weald moors.

Planorbis vortex, Mull. Common in the same locality as the last. Planorbis contortus, Turt. Also common on the Weald Moors.
Planorbis nitidus, Mull. Not so common as the foregoing species, but found in the same locality. The Planorbis nitidus of Muller appears to be the $P$. complanata of Drap. ; $P$. nitidus of Drap. is probably the $P$. contortus of Turton and Linnæus.

Planorbis marginatus, Drap. Common at Eyton.
Limneus magnalis, Linn. Once taken at Eyton.
Limneus palustris, Linn. and Drap. Common. I also find a variety of this species not quite so robust, and never growing to so large a size as the true palustris.

Limneus elongatus, Drap. Once only taken near Watford in a peaty ditch.

Limneus auricularius, Linn., Drap. Common.
Anchylus fuviatilis, Mull. Common : attached to stones in most streams in Shropshire.

Anchylus lacustris, Mull. Twice taken in a mountain stream near Capel Curig.

Paludina impura, Lamk. Common.
Paludina similis, Jeff. P.viridis, Turt. Common on the Weald Moors.

Anodon cygneus, Lamk. Common in pools and in the Shrewsbury canal.

Anodon anatinus, Lamk. Also common in the same localities with the last; the remaining species of this genus are exceedingly doubtful.

Mysca Pictorum, Turt. Common.
Unio Ratana, Lamk. Occasionally taken at Watford.

Helix hispida, Mont. H. sericea, Drap. Common.
Helix lucida, Drap. Common.
Helix radiata, Mont. H. rotundata, Mull., Drap. Common.
Helix ericetorum, Linn. At Rhoscolyn and Towyn Merioneth : common on stones and walls on the sea shore.

Bulimus fasciatus, Mont. B. acutus, Mull. Common on most sandy shores above high water mark, and where there is some slight vegetation.

Pupu Secale, Drap. Very common at Eyton in the autumn, adhering to the under side of logs of wood and stones.

Cyclostoma obtusum, Drap. Common on the Weald moors, adhering to water plants.

Planorbis carinatus, Drap. Common in ditches on the Weald moors.

Planorbis vortex, Mull. Common in the same locality as the last. Planorbis contortus, Turt. Also common on the Weald Moors.
Planorbis nitidus, Mull. Not so common as the foregoing species, but found in the same locality. The Planorbis nitidus of Muller appears to be the $P$. complanata of Drap. ; $P$. nitidus of Drap. is probably the $P$. contortus of Turton and Linnæus.

Planorbis marginatus, Drap. Common at Eyton.
Limneus magnalis, Linn. Once taken at Eyton.
Limneus palustris, Linn. and Drap. Common. I also find a variety of this species not quite so robust, and never growing to so large a size as the true palustris.

Limneus elongatus, Drap. Once only taken near Watford in a peaty ditch.

Limneus auricularius, Linn., Drap. Common.
Anchylus fuviatilis, Mull. Common : attached to stones in most streams in Shropshire.

Anchylus lacustris, Mull. Twice taken in a mountain stream near Capel Curig.

Paludina impura, Lamk. Common.
Paludina similis, Jeff. P.viridis, Turt. Common on the Weald Moors.

Anodon cygneus, Lamk. Common in pools and in the Shrewsbury canal.

Anodon anatinus, Lamk. Also common in the same localities with the last; the remaining species of this genus are exceedingly doubtful.

Mysca Pictorum, Turt. Common.
Unio Ratana, Lamk. Occasionally taken at Watford.

Helix hispida, Mont. H. sericea, Drap. Common.
Helix lucida, Drap. Common.
Helix radiata, Mont. H. rotundata, Mull., Drap. Common.
Helix ericetorum, Linn. At Rhoscolyn and Towyn Merioneth : common on stones and walls on the sea shore.

Bulimus fasciatus, Mont. B. acutus, Mull. Common on most sandy shores above high water mark, and where there is some slight vegetation.

Pupu Secale, Drap. Very common at Eyton in the autumn, adhering to the under side of logs of wood and stones.

Cyclostoma obtusum, Drap. Common on the Weald moors, adhering to water plants.

Planorbis carinatus, Drap. Common in ditches on the Weald moors.

Planorbis vortex, Mull. Common in the same locality as the last. Planorbis contortus, Turt. Also common on the Weald Moors.
Planorbis nitidus, Mull. Not so common as the foregoing species, but found in the same locality. The Planorbis nitidus of Muller appears to be the $P$. complanata of Drap. ; $P$. nitidus of Drap. is probably the $P$. contortus of Turton and Linnæus.

Planorbis marginatus, Drap. Common at Eyton.
Limneus magnalis, Linn. Once taken at Eyton.
Limneus palustris, Linn. and Drap. Common. I also find a variety of this species not quite so robust, and never growing to so large a size as the true palustris.

Limneus elongatus, Drap. Once only taken near Watford in a peaty ditch.

Limneus auricularius, Linn., Drap. Common.
Anchylus fuviatilis, Mull. Common : attached to stones in most streams in Shropshire.

Anchylus lacustris, Mull. Twice taken in a mountain stream near Capel Curig.

Paludina impura, Lamk. Common.
Paludina similis, Jeff. P.viridis, Turt. Common on the Weald Moors.

Anodon cygneus, Lamk. Common in pools and in the Shrewsbury canal.

Anodon anatinus, Lamk. Also common in the same localities with the last; the remaining species of this genus are exceedingly doubtful.

Mysca Pictorum, Turt. Common.
Unio Ratana, Lamk. Occasionally taken at Watford.

Cyclas cornea, Linn. Common.
Cyclas calyculata, Drap. The only locality I know for this shell in the district is in a marl pit near Hutton Grange.

Pisidium obtusale, Pf. Common on the Weald Moors.
Pisidium pusillum, Jen. I have at different times taken two or three specimens of this shell on the Weald Moors.

Pisidium nitidum, Jen. Not very uncommon on the Weald Moors.
Pisidium ammeum, Mull. Taken in the same locality with the last.
XLIX.-On the production of Isinglass from Indian Fishes.

By Dr. Cantor, Corresponding Member of the Zoological Society*.
In the December Number, 1838, of Parbury's Oriental Herald appears a letter ' On the Suleah Fish of Bengal, and the Isinglass it affords': the description of this fish I shall quote in the words of the anonymous writer. "The Suleah Fish," he observes, "when at its full size, runs about four feet in length, and is squaliform, resembling the Shark species in appearance, but exhibiting a more delicate structure than the latter. The meat of this fish is exceedingly coarse, and is converted by the natives, when salted and spiced, into 'burtah,' a piquant relish, well known at the breakfast-tables of Bengal. The bladder of the Suleah may be considered the most valuable part of it, which, when exposed to the sun and suffered to dry, becomes purely pellucid, and so hard that it will repel the edge of a sharp knife when applied to it. These bladders vary from half a pound to three quarters of a pound avoirdupois in weight, when perfectly dry. . . . The Suleah Fish abounds in Channel Creek, off Saugor, and in the ostia or mouths of all the rivers which intersect the Sunderbuns, and are exceedingly plentiful at certain seasons."

Conceiving the great importance of the discovery of isinglass being a product of India, I was naturally anxious to examine the source, arising from a branch of natural history to which in particular I have devoted my attention; but from the general nature of the description, I was obliged to defer my desire of identifying the fish till some future opportunity should enable me to do so. Quite unexpectedly, however, a few days ago, the last overland despatch brought me a letter from my valued friend Mr. McClelland, a Corresponding Member of this Society, an extract of which, bearing upon the point in question, I lose no time in laying before the Society:-•. . . I have now to mention what is of far greater importance in another

[^3]Cyclas cornea, Linn. Common.
Cyclas calyculata, Drap. The only locality I know for this shell in the district is in a marl pit near Hutton Grange.

Pisidium obtusale, Pf. Common on the Weald Moors.
Pisidium pusillum, Jen. I have at different times taken two or three specimens of this shell on the Weald Moors.

Pisidium nitidum, Jen. Not very uncommon on the Weald Moors.
Pisidium ammeum, Mull. Taken in the same locality with the last.
XLIX.-On the production of Isinglass from Indian Fishes.

By Dr. Cantor, Corresponding Member of the Zoological Society*.
In the December Number, 1838, of Parbury's Oriental Herald appears a letter ' On the Suleah Fish of Bengal, and the Isinglass it affords': the description of this fish I shall quote in the words of the anonymous writer. "The Suleah Fish," he observes, "when at its full size, runs about four feet in length, and is squaliform, resembling the Shark species in appearance, but exhibiting a more delicate structure than the latter. The meat of this fish is exceedingly coarse, and is converted by the natives, when salted and spiced, into 'burtah,' a piquant relish, well known at the breakfast-tables of Bengal. The bladder of the Suleah may be considered the most valuable part of it, which, when exposed to the sun and suffered to dry, becomes purely pellucid, and so hard that it will repel the edge of a sharp knife when applied to it. These bladders vary from half a pound to three quarters of a pound avoirdupois in weight, when perfectly dry. . . . The Suleah Fish abounds in Channel Creek, off Saugor, and in the ostia or mouths of all the rivers which intersect the Sunderbuns, and are exceedingly plentiful at certain seasons."

Conceiving the great importance of the discovery of isinglass being a product of India, I was naturally anxious to examine the source, arising from a branch of natural history to which in particular I have devoted my attention; but from the general nature of the description, I was obliged to defer my desire of identifying the fish till some future opportunity should enable me to do so. Quite unexpectedly, however, a few days ago, the last overland despatch brought me a letter from my valued friend Mr. McClelland, a Corresponding Member of this Society, an extract of which, bearing upon the point in question, I lose no time in laying before the Society:-•. . . I have now to mention what is of far greater importance in another

[^4]Cyclas cornea, Linn. Common.
Cyclas calyculata, Drap. The only locality I know for this shell in the district is in a marl pit near Hutton Grange.

Pisidium obtusale, Pf. Common on the Weald Moors.
Pisidium pusillum, Jen. I have at different times taken two or three specimens of this shell on the Weald Moors.

Pisidium nitidum, Jen. Not very uncommon on the Weald Moors.
Pisidium ammeum, Mull. Taken in the same locality with the last.
XLIX.-On the production of Isinglass from Indian Fishes.

By Dr. Cantor, Corresponding Member of the Zoological Society*.
In the December Number, 1838, of Parbury's Oriental Herald appears a letter ' On the Suleah Fish of Bengal, and the Isinglass it affords': the description of this fish I shall quote in the words of the anonymous writer. "The Suleah Fish," he observes, "when at its full size, runs about four feet in length, and is squaliform, resembling the Shark species in appearance, but exhibiting a more delicate structure than the latter. The meat of this fish is exceedingly coarse, and is converted by the natives, when salted and spiced, into 'burtah,' a piquant relish, well known at the breakfast-tables of Bengal. The bladder of the Suleah may be considered the most valuable part of it, which, when exposed to the sun and suffered to dry, becomes purely pellucid, and so hard that it will repel the edge of a sharp knife when applied to it. These bladders vary from half a pound to three quarters of a pound avoirdupois in weight, when perfectly dry. . . . The Suleah Fish abounds in Channel Creek, off Saugor, and in the ostia or mouths of all the rivers which intersect the Sunderbuns, and are exceedingly plentiful at certain seasons."

Conceiving the great importance of the discovery of isinglass being a product of India, I was naturally anxious to examine the source, arising from a branch of natural history to which in particular I have devoted my attention; but from the general nature of the description, I was obliged to defer my desire of identifying the fish till some future opportunity should enable me to do so. Quite unexpectedly, however, a few days ago, the last overland despatch brought me a letter from my valued friend Mr. McClelland, a Corresponding Member of this Society, an extract of which, bearing upon the point in question, I lose no time in laying before the Society:-•. . . I have now to mention what is of far greater importance in another

[^5]
[^0]:    * Morren, Recherches sur le Mouvement et l'Anatomie du Style du Goldfussia anisophylla, 4to. Brux. 1839, avec 2 pl.-Mem. de l'Acad. t. xii.
    $\dagger$ Morren, Recherches sur le Mouvement et l'Anatomie du Stylidium graminifolium, Brux. in 4to, 1838, Mem. de l'Acad. t. xi.

[^1]:    * Morren, Recherches sur le Mouvement et l'Anatomie du Style du Goldfussia anisophylla, 4to. Brux. 1839, avec 2 pl.-Mem. de l'Acad. t. xii.
    $\dagger$ Morren, Recherches sur le Mouvement et l'Anatomie du Stylidium graminifolium, Brux. in 4to, 1838, Mem. de l'Acad. t. xi.

[^2]:    * Morren, Recherches sur le Mouvement et l'Anatomie du Style du Goldfussia anisophylla, 4to. Brux. 1839, avec 2 pl.-Mem. de l'Acad. t. xii.
    $\dagger$ Morren, Recherches sur le Mouvement et l'Anatomie du Stylidium graminifolium, Brux. in 4to, 1838, Mem. de l'Acad. t. xi.

[^3]:    * Read before the Zoulogical Society, July 23, 1839.

[^4]:    * Read before the Zoulogical Society, July 23, 1839.

[^5]:    * Read before the Zoulogical Society, July 23, 1839.

